

In re Appln. of Gridley et al.
Application No. 09/491,661

B1
Sub C

automatically dispensing a length of tire tread based on the circumference of the tire casing, the length of tread having a first end and a tread design; adjusting said tire tread with a(tire drive) relative to a tread cutter so that the tire tread design on each end matches at the point where the tread(may be cut); and cutting the tire tread with the tread cutter to define a second end of the tire tread so that said tread design will appear substantially continuous across a seam generated by each end of said tread once applied to the tire casing.

B2
Sub C

22. (Amended) A tire tread cutting apparatus for cutting a length of tire tread, the length of tire tread having a first end and a second end and a periodically repeating tread pattern, to be affixed to a tire casing having a cushion gum, comprising:

a measuring device adapted to measure at least one of the circumference of the tire casing and the circumference of the tire casing plus the cushion gum;

a tread dispenser adapted to automatically dispense a length of tire tread based on the circumference of at least one of the tire casing and the tire casing plus the cushion gum as measured by the measuring device; and

a tread cutter for cutting the tread to define the length of tread;

wherein the tread dispenser includes a(tread drive) adapted to allow the tire tread to be adjusted relative to the tread cutter to permit the length of tread to be determined such that the ends of the tire tread come together after the tread has been applied to the tire casing and the tread pattern at the second end substantially matches the tread design at the first end.

23. (Amended) The apparatus of claim 22 wherein the tread dispenser includes a plurality of tread rollers for supporting a roll of tire tread, the length of tire tread being dispensed from the roll.

B3
Sub C

26. (Amended) The apparatus of claim 23 wherein the tread dispenser includes a plurality of drive rollers, the drive rollers disposed between the roll of tire tread and the tread cutter, the drive rollers adapted to deploy the tire tread from the roll to the tread cutter.

In re Appn. of Gridley et al.
Application No. 09/491,661

Subj 30. (Amended) The apparatus of claim 29 wherein the first clamp includes a first clamp encoder, and the second clamp includes a second clamp encoder, the first and second clamp encoders adapted to track the location of the first and second clamps, respectively, along the track.

Subj 31. (Amended) The apparatus of claim 29 wherein the first clamp is adapted to propel the first end of the length of tire tread along the track.

Subj 32. (Amended) The apparatus of claim 29 further comprising:
a retractable stop adapted to provide a known location of the first end relative
to the first clamp.

Subj 33. (Amended) The apparatus of claim 29 wherein the tread cutter is disposed a
known distance from the second clamp.